

L4 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:78427 HCAPLUS
 DOCUMENT NUMBER: 134:152626
 TITLE: A biodegradable **polycation** composition for delivery of an anionic **macromolecule** in gene therapy
 INVENTOR(S): **Domb, Abraham J.**
 PATENT ASSIGNEE(S): Polygene Ltd., Israel
 SOURCE: PCT Int. Appl., 66 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

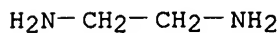
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001007486	A1	20010201	WO 2000-IL420	20000718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1200481	A1	20020502	EP 2000-946249	20000718
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003505473	T2	20030212	JP 2001-512568	20000718
IL 1999-131074 A 19990723 WO 2000-IL420 W 20000718				
PRIORITY APPLN. INFO.: AB The present invention provides a biodegradable polycation compn. for delivery of an anionic macromol., comprising a polysaccharide chain having an amt. of saccharide units ranging from 2 to 2000 and at least one grafted oligoamine per 5 saccharide units, wherein said oligoamine is selected from the group consisting of a linear, branched and cyclic alkyl amine having at least two amino groups, examples of said anionic macromols. are plasmid, an oligonucleotide, an antisense, a peptide, a protein, a polysaccharide and combinations thereof, and said polysaccharide chains are selected from the group consisting of dextrans, arabinogalactan, pullulan, cellulose, cellobiose, inulin, chitosan, alginates and hyaluronic acid.				
IC	ICM C08B037-00			
CC	ICS A61K047-36; A61K048-00			
ST	63-5 (Pharmaceuticals)			
Section cross-reference(s): 33, 44				
gene therapy polysaccharide polyamine graft anionic macromol delivery; biodegradable polycation gene therapy anionic macromol delivery; oligoamine graft polysaccharide gene therapy biodegradable polycation; plasmid delivery gene therapy biodegradable polycation; oligonucleotide delivery gene therapy biodegradable polycation; antisense delivery gene therapy biodegradable polycation; peptide delivery gene therapy biodegradable polycation; protein delivery gene therapy biodegradable polycation; dextran graft biodegradable polycation gene therapy; chitosan				

- graft biodegradable polycation gene therapy; alginate graft biodegradable polycation gene therapy; hyaluronic acid graft biodegradable polycation gene therapy; arabinogalactan graft biodegradable polycation gene therapy; polycation gene therapy; pullulan graft biodegradable polycation gene therapy; cellobiose graft biodegradable polycation gene therapy; inulin graft biodegradable polycation gene therapy
- IT Biodegradable materials
Gene therapy
(a biodegradable polycation compn. for delivery of anionic macromol. in gene therapy)
- IT Polysaccharides, biological studies
RL: IMF (Industrial manufacture); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(conjugates; a biodegradable polycation compn. for delivery of anionic macromol. in gene therapy)
- IT Polysaccharides, biological studies
RL: IMF (Industrial manufacture); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyamine-grafted; a biodegradable polycation compn. for delivery of anionic macromol. in gene therapy)
- IT 71-44-3DP, Spermine, grafted products with oxidized polysaccharides
124-20-9DP, Spermidine, grafted products with oxidized polysaccharides
9002-98-6DP, grafted products with oxidized polysaccharides 9004-54-0DP, Dextran, oxidized, oligoamine grafted products, biological studies
9036-66-2DP, Arabinogalactan, oxidized, oligoamine grafted products
9057-02-7DP, Pullulan, oxidized, oligoamine grafted products
103493-12-5DP, conjugation products with tosylated polysaccharides
168788-09-8DP, conjugation products with tosylated polysaccharides
202145-88-8DP, conjugation products with tosylated polysaccharides
322728-31-4DP, grafted products with oligoamine and Spermine
RL: IMF (Industrial manufacture); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(a biodegradable polycation compn. for delivery of anionic macromol. in gene therapy)
- IT 104-15-4, p-Toluenesulfonic acid, uses
RL: MOA (Modifier or additive use); USES (Uses)
(linking agent; a biodegradable polycation compn. for delivery of anionic macromol. in gene therapy)
- IT 288-32-4, Imidazole, reactions 383-63-1, Ethyl trifluoroacetate
501-53-1, Benzyl chloroformate
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant for terminating agent; a biodegradable polycation compn. for delivery of anionic macromol. in gene therapy)
- IT 71-44-3, Spermine
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; a biodegradable polycation compn. for delivery of anionic macromol. in gene therapy)
- IT 22129-07-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(terminating agent; a biodegradable polycation compn. for delivery of anionic macromol. in gene therapy)
- REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 322728-31-4 REGISTRY
 CN D-Glucaric acid, polymer with 1,2-ethanediamine (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,2-Ethanediamine, polymer with D-glucaric acid (9CI)
 FS STEREOSEARCH
 MF (C6 H10 O8 . C2 H8 N2)x
 CI PMS
 PCT Polyamide, Polyamide formed, Polyester, Polyester formed
 SR CA
 LC STN Files: CA, CAPLUS

CM 1

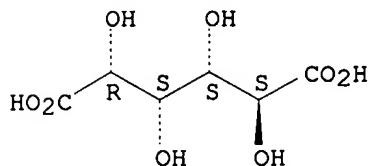
CRN 107-15-3
 CMF C2 H8 N2



CM 2

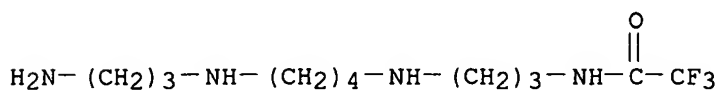
CRN 87-73-0
 CMF C6 H10 O8

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

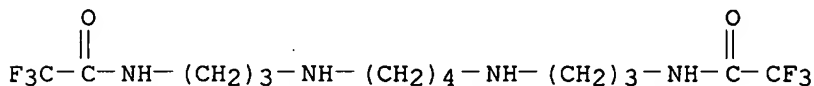
L5 ANSWER 2 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 202145-88-8 REGISTRY
 CN Acetamide, N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C12 H25 F3 N4 O
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

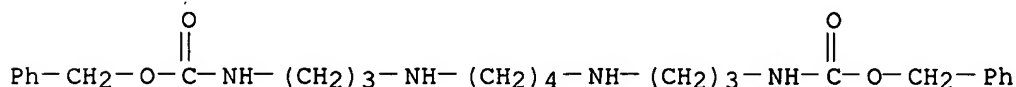
L5 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
RN 168788-09-8 REGISTRY
CN Acetamide, N,N'-[1,4-butanediylbis(imino-3,1-propanediyl)]bis[2,2,2-trifluoro- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1,12-Bis(trifluoroacetamido)-4,9-diazadodecane
FS 3D CONCORD
MF C14 H24 F6 N4 O2
CI COM
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
RN 103493-12-5 REGISTRY
CN 2,6,11,15-Tetraazahexadecanedioic acid, bis(phenylmethyl) ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H38 N4 O4
CI COM
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

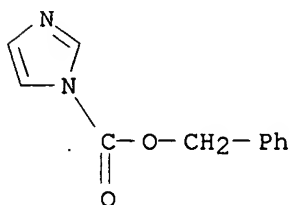


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

16 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
16 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
RN 22129-07-3 REGISTRY

CN 1H-Imidazole-1-carboxylic acid, phenylmethyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Imidazole-1-carboxylic acid, benzyl ester (7CI, 8CI)
FS 3D CONCORD
MF C11 H10 N2 O2
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

22 REFERENCES IN FILE CA (1907 TO DATE)
22 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 6 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
RN 9057-02-7 REGISTRY
CN Pullulan (9CI) (CA INDEX NAME)
OTHER NAMES:
CN P 10
CN P 10 (carbohydrate)
CN P 100
CN P 100 (carbohydrate)
CN P 20
CN P 20 (carbohydrate)
CN P 800
CN P 800 (carbohydrate)
CN PF 20
CN PF 20 (carbohydrate)
CN PF 30
CN PF 7
CN PF 7 (carbohydrate)
CN PI 20
CN Pluran T 1600
CN Pullulan PF 10
CN PX 1
DR 58252-16-7, 58391-35-8, 152743-43-6
ENTE A polymer of maltotriose, .alpha.-(1.fwdarw.6) between maltotrioses. Only entry
MF Unspecified
CI PMS, COM, MAN
PCT Manual registration, Polyother, Polyother only
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NAPRALERT, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

2203 REFERENCES IN FILE CA (1907 TO DATE)
304 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2203 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN

RN 9036-66-2 REGISTRY

CN D-Galacto-L-arabinan (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Arabinogalactan

CN FiberAid

CN Galactoarabinan

CN L-Arabino-D-galactan

DR 98530-09-7, 113956-37-9, 37280-16-3

MF Unspecified

CI COM, MAN

LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IMSDRUGNEWS,
IMSRESEARCH, IPA, MEDLINE, MSDS-OHS, NAPRALERT, PIRA, PROMT, TOXCENTER,
USPAT2, USPATFULL

Other Sources: EINECS**, NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

1154 REFERENCES IN FILE CA (1907 TO DATE)
110 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1156 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN

RN 9004-54-0 REGISTRY

CN Dextran (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Dextrans (8CI)

OTHER NAMES:

CN .alpha.-Dextran

CN CDC-H

CN DEX 500

CN Dextran 1.5

CN Dextran 10

CN Dextran 1000

CN Dextran 110

CN Dextran 15

CN Dextran 150

CN Dextran 2000

CN Dextran 250

CN Dextran 3000

CN Dextran 40

CN Dextran 45

CN Dextran 500

CN Dextran 60

CN Dextran 70

CN Dextran 75

CN Dextran B 512
CN Dextran B1355
CN Dextran D 10
CN Dextran PL 1S
CN Dextran PT 25
CN Dextran PVD
CN Dextran RMI
CN Dextran T 10
CN Dextran T 110
CN Dextran T 150
CN Dextran T 20
CN Dextran T 2000
CN Dextran T 500
CN Dextran T 70
CN Dextranen
CN Dextraven
CN Eudextran
CN Expandex
CN Gentran
CN Hemodex
CN Hyscon
CN Hyskon
CN Infucoll
CN Intrader
CN Intradex
CN LMD
CN LMWD
CN Longasteril 70
CN LU 122
CN LVD
CN Macrodex

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

DR 12626-85-6, 9013-80-3, 9044-66-0, 11104-36-2, 11121-03-2, 37224-17-2,
86280-85-5

MF Unspecified

CI PMS, COM, MAN

PCT Manual registration, Polyother, Polyother only

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA, CABA,
CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX,
CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE,
IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR,
PIRA, PROMT, RTECS*, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

14283 REFERENCES IN FILE CA (1907 TO DATE)

2411 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

14300 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 9 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN

RN 9002-98-6 REGISTRY

CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethylenimine, polymers (8CI)

OTHER NAMES:

CN 15T
CN 210T
CN 2MB
CN A 131X
CN AC 871
CN Adcote 372
CN Aziridine polymer
CN Basocoll PR 8086
CN Bufloc 595
CN CF 218
CN CF 218 (polymer)
CN Corcat P 100
CN Corcat P 12
CN Corcat P 145
CN Corcat P 150
CN Corcat P 18
CN Corcat P 200
CN Corcat P 600
CN Duramax 1007
CN EA 275
CN EL 402
CN EL 420
CN Emerlube 6717
CN Epomin
CN Epomin 1000
CN Epomin 1050
CN Epomin 150T
CN Epomin D 3000
CN Epomin P 003
CN Epomin P 012
CN Epomin P 1000
CN Epomin P 1030
CN Epomin P 1050
CN Epomin P 1500
CN Epomin P 200
CN Epomin P 500
CN Epomin SP 003
CN Epomin SP 006
CN Epomin SP 012
CN Epomin SP 018
CN Epomin SP 1000
CN Epomin SP 103
CN Epomin SP 110
CN Epomin SP 200
CN Epomin SP 300
CN Ethyleneimine homopolymer
CN Ethylenimine homopolymer
CN Everamine
CN Everamine 150T

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY

DR 96956-22-8, 96956-23-9, 96956-24-0, 66456-64-2, 69522-69-6, 145379-92-6,
81210-07-3, 81210-08-4, 81210-09-5, 92047-44-4, 39289-19-5, 391936-72-4,
461012-73-7
MF (C2 H5 N)x
CI PMS, COM

PCT Polyamine, Polyamine formed
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
 CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN,
 CSCHM, CSNB, DDFU, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,
 ENCOMPPAT2, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NIOSHTIC,
 PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, USPAT2, USPATFULL, VTB
 (*File contains numerically searchable property data)
 Other Sources: DSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

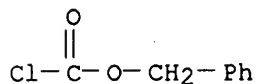
CM 1

CRN 151-56-4
 CMF C2 H5 N



8689 REFERENCES IN FILE CA (1907 TO DATE)
 2194 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 8705 REFERENCES IN FILE CAPLUS (1907 TO DATE)

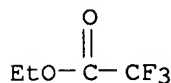
L5 ANSWER 10 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 501-53-1 REGISTRY
 CN Carbonochloridic acid, phenylmethyl ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Formic acid; chloro-, benzyl ester (6CI, 7CI, 8CI)
 OTHER NAMES:
 CN (Benzyloxy)carbonyl chloride
 CN Benzyl carbonochloridate
 CN Benzyl chlorocarbonate
 CN Benzyl chloroformate
 CN Carbobenzoxoy chloride
 CN Carbobenzyloxy chloride
 CN Chloroformic acid benzyl ester
 CN NSC 83466
 CN Phenylmethyl chloroformate
 FS 3D CONCORD
 DR 94274-21-2
 MF C8 H7 Cl O2
 CI COM
 LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,
 CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHM, DETHERM*, GMELIN*,
 HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, PS,
 RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3696 REFERENCES IN FILE CA (1907 TO DATE)
15 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3702 REFERENCES IN FILE CAPLUS (1907 TO DATE)
8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 11 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
RN 383-63-1 REGISTRY
CN Acetic acid, trifluoro-, ethyl ester (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Ethyl .alpha.,.alpha.,.alpha.-trifluoroacetate
CN Ethyl perfluoroacetate
CN Ethyl trifluoroacetate
CN NSC 220215
CN Trifluoroacetic acid ethyl ester
FS 3D CONCORD
MF C4 H5 F3 O2
CI COM
LC STN Files: AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS,
CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, CSNB, DETHERM*,
GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, PS, SPECINFO, SYNTHLINE,
TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

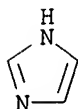


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

975 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
977 REFERENCES IN FILE CAPLUS (1907 TO DATE)
52 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 12 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
RN 288-32-4 REGISTRY
CN 1H-Imidazole (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Imidazole (8CI)
OTHER NAMES:
CN 1,3-Diaza-2,4-cyclopentadiene
CN 1,3-Diazole
CN Glyoxalin
CN Glyoxaline
CN Imidazol
CN Imutex
CN Methanimidamide, N,N'-1,2-ethenediyl-
CN Miazole
CN NSC 60522

FS 3D CONCORD
 DR 146117-15-9, 116421-26-2
 MF C3 H4 N2
 CI COM, RPS
 LC STN Files: ANABSTR, CA, CAOLD, CHEMLIST, CIN, CSCHEM, CSNB, HODOC*,
 IFICDB, IFIPAT, IFIUDB, MEDLINE, PROMT, RTECS*
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

13197 REFERENCES IN FILE CA (1907 TO DATE)
 2091 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 13215 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 101 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

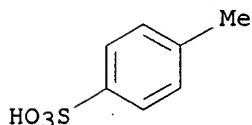
L5 ANSWER 13 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 124-20-9 REGISTRY
 CN 1,4-Butanediamine, N-(3-aminopropyl)- (8CI, 9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Spermidine (6CI)
 OTHER NAMES:
 CN 1,5,10-Triazadecane
 CN 4-Azaoctane-1,8-diamine
 CN N-(3-Aminopropyl)-1,4-butanediamine
 CN N-(3-Aminopropyl)-1,4-diaminobutane
 CN N-(3-Aminopropyl)-4-aminobutylamine
 CN N-(4-Aminobutyl)-1,3-diaminopropane
 CN Spermidin
 FS 3D CONCORD
 MF C7 H19 N3
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU,
 EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS,
 NAPRALERT, NIOSHTIC, PIRA, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER,
 USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8736 REFERENCES IN FILE CA (1907 TO DATE)
231 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8744 REFERENCES IN FILE CAPLUS (1907 TO DATE)
86 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
RN 104-15-4 REGISTRY
CN Benzenesulfonic acid, 4-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN p-Toluenesulfonic acid (7CI, 8CI)
OTHER NAMES:
CN 4-Methylbenzenesulfonic acid
CN 4-Toluenesulfonic acid
CN Cyzac 4040
CN K-Cure 1040
CN Nacure 1040
CN NSC 167068
CN NSC 2167
CN p-Methylbenzenesulfonic acid
CN p-Methylphenylsulfonic acid
CN p-Toluenesulphonic acid
CN p-Tolylsulfonic acid
CN PTS 100
CN Toluenesulfonic acid
CN Tosic acid
AR 25231-46-3, 633305-48-3
FS 3D CONCORD
DR 402-47-1, 128739-80-0, 126033-27-0, 114213-96-6, 156627-46-2, 144647-92-7,
100901-72-2, 210357-81-6, 227313-49-7, 369371-25-5, 613262-31-0
MF C7 H8 O3 S
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CABA,
CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSNB,
DDFU, DRUGU, EMBASE, HODOC*, IFICDB, IFIUDB, IPA, MRCK*, NAPRALERT,
PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2,
USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9675 REFERENCES IN FILE CA (1907 TO DATE)
356 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9682 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 15 OF 15 REGISTRY COPYRIGHT 2004 ACS on STN
RN 71-44-3 REGISTRY
CN 1,4-Butanediamine, N,N'-bis(3-aminopropyl)- (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Spermine (6CI)
OTHER NAMES:
CN 1,5,10,14-Tetraazatetradecane
CN 4,9-Diazadodecane-1,12-diamine
CN Gerontine
CN Musculamine
CN N,N'-Bis(3-aminopropyl)-1,4-butanediamine
CN N,N'-Bis(3-aminopropyl)-1,4-tetramethylenediamine
CN Neuridine
CN NSC 268508
CN Spermin
FS 3D CONCORD
DR 115-04-8
MF C10 H26 N4
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*,
BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS,
CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHM, CSNB,
DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB,
IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*,
SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

$\text{H}_2\text{N}-(\text{CH}_2)_3-\text{NH}-(\text{CH}_2)_4-\text{NH}-(\text{CH}_2)_3-\text{NH}_2$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8469 REFERENCES IN FILE CA (1907 TO DATE)
263 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8478 REFERENCES IN FILE CAPLUS (1907 TO DATE)
106 REFERENCES IN FILE CAOLD (PRIOR TO 1967)